

# Trabuco Canyon Water District

## Addendum No. 2

To  
Contract Documents  
For

Rose Canyon and Lang Wells  
Groundwater Treatment Facility  
November 12, 2009

This addendum is hereby made part of the Contract Documents. Receipt of the addendum shall be noted on the Bid Form. The following changes, additions, clarifications, or modifications shall be made to the Contract Documents; all other conditions remain the same:

### **CONTRACT DOCUMENTS - VOLUME 1**

#### **BID DOCUMENTS – BID FORM**

Replace Schedule of Work Items, Bid Form pages 3,4,5,6, and 7 of 22 with the attached Schedule of Work Items (rev. November 12, 2009), Bid Form pages 3,4,5,6, and 7 of 22.

### **CONTRACT DOCUMENTS - VOLUME 2**

#### **A. Section 02220 TRENCHING, BACKFILLING, AND COMPACTION**

1. Page 02220-4, Article 3.06 BACKFILLING, paragraph B:  
Replace Table under 3.06.B with the following:

“Pipe bedding zone and trench backfill shall have a minimum of 92 percent relative compaction, unless otherwise specified.”

#### **B. Section 02270 SEDIMENTATION AND EROSION CONTROL**

Because of the size of the project, a SWPPP may not be required for this project, however the County of Orange requires a plan for sedimentation and erosion control suitable for projects with less than one (1) acre of disturbed soil area.

1. For Section 02270, Replace the following: “ *California Storm Water Best Management Practice Handbook for the Construction Activity*” with “*County of Orange Storm Water Program and the County of Orange Storm Water Program Construction Runoff Guidance Manual*”.

2. Page 02270-1, Article 1.01 SCOPE OF WORK, paragraph D:

Delete Article 1.01.D and replace with the following:

“D. The Contractor shall implement best management practices (BMPs) and methods in accordance with the County of Orange Storm Water Program and the County of Orange Storm Water Program Construction Runoff Guidance Manual or per the SWPPP Section 01565 (if applicable). Project BMPs shall include, but not be limited to good housekeeping practices and erosion and sedimentation and control to prevent the direct and indirect contribution of any contaminants into the storm drain system or waters of the United States.”

2. Page 02270-1, Article 1.03 SUBMITTALS:

Add the following: “At least five (5) working days prior to start of work with the potential to cause water pollution, submit a Water Pollution Control Plan (plan) prepared in accordance with the County of Orange Storm Water Program and the County of Orange Storm Water Program Construction Runoff Guidance Manual. If required by the County of Orange, the plan shall be approved by the County of Orange prior to submittal.”

C. Section 04230 REINFORCED MASONRY

1. Page 04230-3, Article 2.02 MATERIALS

Replace “A. Integral Water Repellent - ... test specimen.” with the following:

“A. Integral Water Repellent – (applicable to Pump Building). Provide units made with liquid polymeric, integral water repellent admixture that does not reduce flexural bond strength. Amount used shall be as submitted and approved. Units made with integral water repellent, when tested as a wall assembly made with mortar containing integral water-repellent Manufacturer’s mortar additive according to ASTM E514, using 4-in wythe units, with test period extended to 24 hours, shall show no visible water or leaks on the back of the test specimen.”

D. Section 04720 MANUFACTURED STONE

1. Page 04720-3, Article 2.01 MATERIALS, paragraph B. Acceptable Manufacturer:

Replace “1. Arizona Stone, Tuscanvilla Stone, Florentine, or approved equal.” with the following:

“1. Coronado Stone, Style: Creek Rock, Color: Apache Brown, or approved equal.”

E. Section 11300 TWO-STAGE PRESSURE FILTRATION SYSTEM – GENERAL

1. Page 11300-14, Article 2.04. INSTRUMENTATION AND CONTROLS

Paragraph C, insert the following after “NEMA 4x stainless steel”:  
“or NEMA 12” .

**F. Section 11345 HORIZONTAL FIBERGLASS TANKS**

**1. Page 11345-3, Article 2.01 GENERAL**

Add the following paragraph: “ D. Tank and material and equipment that comes in contact with water shall meet NSF Standard 61 requirements for contact with potable water.”

**G. Section 11346 BURIED FIBERGLASS TANKS**

**1. Page 11346-1, Article 1.03 SUBMITTALS, Paragraph A:**

Add “11. Structural design, details, and calculations required to anchor the buried tank against high groundwater uplift forces and pressure. Design and calculations shall be prepared and signed by a Registered California Structural or Civil Engineer.”

**2. Page 11346-3, Article 2.03 FIBERGLASS TANKS, Paragraph A,**

Add the following: “ 9. Seasonal groundwater surface elevation varies. Tank design shall account for multiple groundwater elevations that range from groundwater levels below tank (i.e. water surface elevation below bottom of tank) to complete submergence (i.e. water surface elevation above top of tank).”

**3. Page 11346-4, Article 2.03 FIBERGLASS TANKS, Paragraph B,**

Add the following: “ 9. Seasonal groundwater surface elevation varies. Tank design shall account for multiple groundwater elevations that range from groundwater levels below tank (i.e. water surface elevation below bottom of tank) to complete submergence (i.e. water surface elevation above top of tank).”

**CONTRACT DOCUMENTS - VOLUME 3**

**1. Sheet No. C-2**

**a. Add the following Notes 2,3,4 and 5 after Note 1:**

“ 2. Corrective grading shall be performed within the treatment facility, below pavement areas, and below perimeter screen/retaining walls. Corrective grading shall consist of over-excavation to elevation 1004' to remove existing undocumented fill soils, subject to verification by the geotechnical engineer based on conditions exposed during grading. The corrective grading bottom shall be processed to an additional depth of 6” (i.e., El. 1003.5'). Processing shall include moisture conditioning, removal of oversized rock materials (i.e., >6” diameter), and compaction. Soils removed during corrective grading can be used for fill if the following have been removed: rocks >6” diameter, organic debris, asphalt debris, and other manmade debris.”

“3. Decomposed granite (DG) trail and access way shall have a minimum depth of 4-inches, with 95 percent compaction, placed over 6-inches of 95 percent compacted crushed granular road base. DG shall be mixed with commercially available aggregate binder additive suitable for decomposed granite applications.”

“4. Asphalt Paving. See Sheet C-4 Detail H for asphalt paving detail. Aggregate base may be crushed miscellaneous base (CMB) with 95 percent relative compaction; subgrade shall be compacted to 92 percent relative compaction.”

“5. Site groundwater levels: May to June 2009: Groundwater Elevation = 996 feet. October 2009 groundwater elevation = below 980 ft. Typical wet season water surface elevations (WSE) vary up to and greater than 1002 ft.”

2. Sheet No. C-3.

- a. Add the following note: “FW-STL shall be per Section 02617 BURIED STEEL PIPE AND FITTINGS. All FW-STL lines, valves, fittings, joints, adapters, hardware, lining, and thrust blocks shall be rated for a design pressure of 220 psig and test pressure of 300 psig.”
- b. Add the following note: 8”PW-PVC shall be per Section 02622 POLYVINYL CHLORIDE (PVC) PIPE. All 8” PW-PVC lines, valves, fittings, joints, adapters, hardware, lining, and thrust blocks shall be rated for a design pressure of 150 psig and test pressure of 225 psig.”

3. Sheet No. C-4. Detail E - PVC Pipe Bedding

- a. Delete references to AASHTO on detail. Delete note 1 in its entirety and replace with the following:

“1. PIPE BEDDING AND TRENCH BACKFILL shall be per Section 02220 TRENCHING, BACKFILLING, and COMPACTION. Pipe bedding zone and trench backfill shall have a minimum of 92 percent relative compaction.”

4. Sheet No. A-3. Section A

- a. Add the following note applicable to Section A: “See Sheet A-5, Details A, B, and C for additional construction details.”

5. Sheet No. A-4. Detail B – Removable Panel Detail

- a. Add the following note: “Equipment Roof Hatch shall be 36”x36” BILCO Model Type E Aluminum Roof Hatch, or equal”.

6. Sheet No. S-11. Detail F – Retaining Wall

- a. Replace “4’-0” FENCE PER ARCH” with the following:

“6’-0” FENCE PER ARCH”

- b. Replace “DRAIN PIPE PER CIVIL” call out with the following:


“ 4-INCH PERFORATED DRAIN PIPE, SURROUNDED BY 1 CUBIC FOOT OF ¾” ROCK AND ENCASED IN MIRAFI 140N FILTER FABRIC, OR EQUAL. DRAIN PIPE IS LOCATED ALONG RETAINING WALL WITH OUTLET TO ROCK DRY WELL AS SHOWN IN SHEET A-5.”

7. Sheet No. M-2. Delete all references to Typ. WSE WET SEASON 988' +/-.
8. Sheet No. M-3 and M-4
  - a. Add an 8"x6" reducer upstream of the 8" tee for the connection of the 6" RW from each well. Total of 8"x6" reducers added.
  - b. BWS line is 8" throughout, not 10" as shown and as referenced in Note 3. Delete 10"x8" BWS reducer, delete 10"x8" BWS tees
9. Sheet No. M-6, Section A
  - a. Add the following note: 8" FW suction line can be ductile iron (DI) pipe or steel (STL)."
  - b. Add the following note: 8" FW discharge line shall be per Section 02617 BURIED STEEL PIPE AND FITTINGS. All 8"FW lines, valves, fittings, joints, adapters, hardware, lining, and thrust blocks shall be rated for a design pressure of 220 psig and test pressure of 300 psig."
10. Sheet No. E-2
  - a. Backwash Return Pumps No. 1 (PMP 310) and No. 2 (PMP-320) have constant speed drives. Electrical design and size of motor control center accounts for future VFDs to these pumps. Please insert "FUTURE" after VFD on the MCC elevation view for PMP 310 and PMP 320.
11. Sheet No. E-3
  - a. Replace Note 2 with the following:

"2. LOCATION OF EQUIPMENT AND CONDUIT ENDINGS VARIES FOR EACH FILTRATION SYSTEM. LOCATION OF EQUIPMENT AND CONDUIT ENDINGS FOR INSTRUMENTATION AND POWER SHALL BE COORDINATED WITH EACH FILTRATION SYSTEM."

END OF ADDENDUM NO. 2

November 12, 2009  
Date

  
District Engineer

**SCHEDULE OF WORK ITEMS**  
(rev. November 12 , 2009)  
**Rose Canyon and Lang Wells**  
**Groundwater Treatment Facility**

ITEM NO.	ITEM DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	TOTAL PRICE
1	Mobilization, Demobilization, Temporary Facilities, and Cleanup	1	LS		\$ _____
2	Bonds and Insurances, excluding Builder's Risk "All Risk" Insurance	1	LS		\$ _____
3	Builder's Risk "All Risk" Insurance	1	LS		\$ _____
4	Permits	1	LS		\$ _____
5	Plans and Provisions for Pollution Prevention, Sedimentation, and Erosion Control per Section 02270	1	LS		\$ _____
6	Trench safety measures, guarding underground construction, including shoring, bracing, steel plates, traffic control, safety plan, and all other safety requirements and permits	1	LS		\$ _____
7	Final O&M Manuals and Record Drawings, and Record Documents, excluding electrical point to point connection diagrams	1	LS		<b>\$ 15,000</b> _____
8	Point to point connection diagrams per Electrical-General Provisions Section 16000 Article 1.14.15	1	LS		<b>\$ 15,000</b> _____
9	System startup and testing	1	LS		\$ _____
10	Construction Survey Staking	1	LS		\$ _____
11	All Traffic Control Requirements	1	LS		\$ _____
12	Demolition and Disposal	1	LS		\$ _____

ITEM NO.	ITEM DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	TOTAL PRICE
13	Interim Operation - Rose Canyon Well	1	LS		\$ _____
14	Rose Canyon Well Facility Roof Replacement (See Special Provisions)	200	SF	\$ _____	\$ _____
15	Site and Civil Work, excluding retaining and perimeter screen walls, fence, entrance gate, asphalt paving, yard piping and valves	1	LS		\$ _____
16	Asphalt Paving	3000	SF	\$ _____	\$ _____
17	Retaining Wall, smooth face CMU, w/ 6-ft high security chain link fence	184	LF	\$ _____	\$ _____
18	Perimeter Screen/Security Wall, split-face CMU, with piers, pre-cast caps and precast reveal	285	LF	\$ _____	\$ _____
19	Entrance Gate	1	LS		\$ _____
20	Yard Piping and Valves	1	LS		\$ _____
21	Pressure Reducing Valve (PRV) and BWS Flow Control Station	1	LS		\$ _____
22	Filter Canopy Structure	1	LS		\$ _____
23	Electrical/Pump/Chemical Building	1	LS		\$ _____
24	Chemical Feed System and Components	1	LS		\$ _____
25	Finished Water/Effluent Pump Station	1	LS		\$ _____
26	Chlorine Contact Tank/Clear Well	1	LS		\$ _____
27	Backwash Waste Settling Tank and Pumps	1	LS		\$ _____
28	Backwash Sludge Collection Tank and Pump	1	LS		\$ _____

ITEM NO.	ITEM DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	TOTAL PRICE
29	Rose and Lang Well Pump and Drives, plus spare pump and drive	1	LS		\$ _____
30	Elevated Water Storage Tank	1	LS		\$ _____
31	SCE Site Electrical (Per SCE DWO 6443-2203), including all new concrete pad, conduits, conductors, pull boxes, meters, and other equipment as shown from existing SCE pole to new SCE transformer and new SCE meter located at Main Switch Board. Excludes retaining wall per SCE requirements (See Special Provisions)	1	LS		\$ _____
32	SCE Transformer Retaining Wall, (Per SCE DWO 6443-2203).	1	LS		\$ _____
33	Electrical, excluding SCE Site Electrical and excluding Two Stage Pressure Filtration System electrical	1	LS		\$ _____
34	Instrumentation and Controls System (Division 13)	1	LS		\$ _____
35	Signage, Fire Extinguishers (Division 10)	1	LS		\$ _____
36	Two Stage Pressure Filtration System – EPD OPTION 1, including ALL tanks, media, piping, valves, electrical, and instrumentation	1	LS		\$ _____
*ADDITION (+) OR					+ \$ _____
*DEDUCTION (-)					- \$ _____
<b>TOTAL BASE BID</b>					<b>\$ _____</b>

**TOTAL AMOUNT OF BASE BID (WRITTEN IN WORDS):**

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**Alternate Bid Items 1**

ALTERNATE ITEM NO.	ITEM DESCRIPTION	EST QTY	UNIT	UNIT PRICE	TOTAL PRICE
A-4 (ADD)	<b>ADD Two Stage Pressure Filtration System – Siemens OPTION 2, including ALL tanks, media, piping, valves, electrical, and instrumentation</b>	1	LS		+ \$ _____
D-1 (DEDUCT)	<b>DEDUCT Item 36 Two Stage Pressure Filtration System- EPD Option 1, including ALL tanks, media, piping, valves, electrical, and instrumentation</b>	1	LS		- \$ _____
<b>SUBTOTAL Alternate Bid Items 1</b>					<b>\$ _____</b>

**SUBTOTAL AMOUNT OF ALTERNATE BID ITEMS 1 (WRITTEN IN WORDS):**  

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**Alternate Bid Items 2**

ALTERNATE ITEM NO.	ITEM DESCRIPTION	EST QTY.	UNIT	UNIT PRICE	TOTAL PRICE
A-1 (ADD)	<b>ADD Stone Veneer (Manufactured Stone) to Perimeter Screen/Security Wall, complete per design</b>	1	LS		+ \$ _____
A-2 (ADD)	<b>ADD Monumental Sign</b>	1	LS		+ \$ _____
A-3 (ADD)	<b>ADD Storm Water Pollution Prevention Plan</b>	1	LS		+ \$ _____
<b>SUBTOTAL Alternate Bid Items 2</b>					<b>\$ _____</b>

**SUBTOTAL AMOUNT OF ALTERNATE BID ITEMS 2 (WRITTEN IN WORDS):**  

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**① PROJECT TOTAL w/ OPTION 1**

**TOTAL BASE BID** \$ \_\_\_\_\_  
**SUBTOTAL Alternate Bid Items 2** \$ \_\_\_\_\_  
**TOTAL AMOUNT OF BASE BID AND  
ALTERNATE BID ITEMS 2** \$ \_\_\_\_\_

**TOTAL AMOUNT OF BASE BID AND ALTERNATE BID ITEMS 2  
(WRITTEN IN WORDS):**

\_\_\_\_\_

**② PROJECT TOTAL w/ OPTION 2**

**TOTAL BASE BID** \$ \_\_\_\_\_  
**SUBTOTAL Alternate Bid Items 1** \$ \_\_\_\_\_  
**SUBTOTAL Alternate Bid Items 2** \$ \_\_\_\_\_  
**TOTAL AMOUNT OF BASE BID AND  
ALTERNATE BID ITEMS 1 AND 2** \$ \_\_\_\_\_

**TOTAL AMOUNT OF BASE BID AND ALTERNATE BID ITEMS 1 AND 2  
(WRITTEN IN WORDS):**

\_\_\_\_\_

Signature of Bidder: \_\_\_\_\_ Date: \_\_\_\_\_

It is understood that the foregoing quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation will be computed upon the basis of the actual quantities in the completed Work whether they be more or less than those shown. Owner reserves the right to award the Work to the lowest responsible bidder based on any single schedule or combination of schedules of bid items deemed by Owner in its sole discretion, to be in Owner's best interest.

\* Provision is made here for the bidder to include an addition or deduction in their Bid, if Bidder wishes, to reflect any last minute adjustments in price. The addition or deduction, if made, will be proportionately applied to the progress payments for items \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, and \_\_\_\_\_. (If no items are listed the addition or deduction shall be treated as a separate bid item, and payment or deduction shall be treated as a separate bid item, and payment or deduction for this item shall be proportionate to the percentage payment for completed work).